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Don W Bulson Renner Otto Boisselle & Sklar 1621 Euclid Avenue 19th Floor Cleveland, OH 44115				
EXAMINER				
LAM, VINH TANG				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/563,192

Applicant(s)

STROMBERG, ROLF

Examiner

VINH LAM

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4,5,7-9,16 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,10-15,17,18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims **1-3, 11-15, 17, and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Oberg (US Patent No. 5270690)**.

Regarding Claim **1**, (currently amended) **Oberg** teaches a loop means for pointing devices for guiding a cursor on a computer screen or the like, comprising:

a flexible support material (*Col. 3, Ln. 53-54, FIGs. 3-5, i.e. rotatable belts or bands 18; Col. 6, Ln. 43, FIGs. 13-14, i.e. flexible wires 58*) in the form of a cylinder (*Col. 3, Ln. 55, FIG. 5, i.e. oblong-shaped*) having a longitudinal axis (*Col. 4, Ln. 48-51, FIG. 5*) and capable of being axially moved (*Col. 3, Ln. 66-68, Col. 4, Ln. 1, FIG. 5*) and circumferentially rotated (*Col. 3, Ln. 66-68, Col. 4, Ln. 1, FIG. 5*) around two axially oriented supports (*Col. 3, Ln. 63-66, FIG. 4, i.e. belt segments 56*) that extend parallel to the longitudinal axis (*FIG. 5*) for stretching a cross-section of the loop to an oval shape (*Col. 3, Ln. 51-59, FIG. 5, i.e. oblong-shaped*),

said flexible support material having a number of mutually circumferentially spaced, axially elongated, stiffening strips or equivalent means substantially parallel to

the longitudinal axis for stiffening the loop means in its axial direction (*Col. 3, Ln. 43, FIGs. 13-14, i.e. belt segments 56*), said stiffening strips or equivalent means each having a circumferential width; and

a friction material on an external surface of the flexible support material (*Col. 6, Ln. 65-68, FIG. 16*), said friction material having a significantly varying thickness at different places measured outwards from the external surface of the flexible support material (*Col. 6, Ln. 51-52, FIGs. 15-17, i.e. truncated pyramid*).

Although **Oberg's** specification and drawings do not *explicitly teach* and *conclusively illustrate*, respectively, the stiffening strips or equivalent means having an axial length, greater than the collective circumferential widths of a plurality of stiffening strips or equivalent means.

However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the size and shape of **Oberg's** loop means (*FIGs. 13 & 20*) to create the stiffening strips or equivalent means having an axial length, greater than the collective circumferential widths of a plurality of stiffening strips or equivalent means so that the loop means that would yield in a predictable results accommodate the Choice of Design of different makes, model, style, and consumers' taste, *In re Schreiber*, 128 F.3d 1473, 44 USPQ2d 1429 (Fed. Cir. 1997).

Regarding Claim 2, (previously presented) **Oberg** teaches the loop means according to claim 1, wherein longitudinal zones (*FIG. 13, i.e. gaps exposed 58 between belt segments 56*) defined by and between the strips have friction material, and the friction material within the longitudinal zones is less than an average concentration

of the friction material on the external surface of the flexible support material (*Col. 6, Ln. 24-27, Ln. 36-39, Ln. 46-47, Ln. 65-68, FIGs. 10-16*).

Regarding Claim 3, (previously presented) **Oberg** teaches the loop means according to claim 1, wherein the friction material is arranged substantially in the form of friction strips above the stiffening strips (*Col. 6, Ln. 58-68, FIG. 16*).

Regarding Claim 11, (previously presented) **Oberg** teaches the loop means according to claim 1, wherein the stiffening strips or equivalent means includes stiffening strips (*Col. 3, Ln. 43, FIGs. 13-14, i.e. belt segments 56*).

Regarding Claim 12, (previously presented) **Oberg** teaches the loop means according to claim 11, wherein the stiffening strips are provided on a side of the flexible support material opposite the friction material (*Col. 3, Ln. 43, FIGs. 13-14, i.e. belt segments 56*).

Regarding Claim 13, (previously presented) **Oberg** teaches the loop means according to claim 11, wherein the axial length of the stiffening strips is considerably greater than the circumferential width of the stiffening strips (*FIG. 13*).

Regarding Claim 14, (previously presented) **Oberg** teaches the loop means according to claim 11, wherein longitudinal zones defined by and between the strips have friction material, and the friction material within the longitudinal zones is less than an average concentration of the friction material on the external surface of the flexible support material (*Col. 6, Ln. 24-27, Ln. 36-39, Ln. 46-47, Ln. 65-68, FIGs. 10-16*).

Regarding Claim 15, (previously presented) **Oberg** teaches the loop means according to claim 11, wherein the friction material is arranged substantially in the form of friction strips aligned with the stiffening strips (*Col. 6, Ln. 24-27, Ln. 36-39, Ln. 46-47, Ln. 65-68, FIGs. 10-16*).

Regarding Claim 17, (previously presented) **Oberg** teaches the loop means according to claim 11, wherein the flexible support material is formed by a substantially rectangular strip of flexible support material joined together to form a cylinder, and at least a portion of the joint is situated over one of the stiffening strips (*Col. 6, Ln. 24-27, Ln. 36-39, Ln. 46-47, Ln. 65-68, FIGs. 10-16*).

Regarding Claim 20, (previously presented) **Oberg** teaches the loop means according to claim 1, wherein the friction material is coated on the external surface of the flexible support material (*Col. 6, Ln. 65-68, FIG. 16*).

2. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Oberg** (US Patent No. 5270690) in view of **Crawford** (US Patent No. RE40324).

Regarding Claim 6, (previously presented) **Oberg** teaches the loop means according to claim 1.

However, **Oberg** does not teach that the support material consists of fabric.

In the same field of endeavor, **Crawford** teaches that the support material consisting of fabric (*Col. 3, Ln. 26*).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine **Oberg** teaching of loop means comprising flexible support material and friction material strips with **Crawford** teaching of the support material consisting of fabric *in order to* provide comfort and flexibility for user.

3. Claims **10** and **18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Oberg (US Patent No. 5270690)** in view of **Hu (US Patent No. 6586720)**.

Regarding Claims **10** and **18**, (previously presented) **Oberg** teaches the loop means according to claims 1 and 11 respectively.

However, **Oberg** does not teach that the friction material containing small reflecting particles that are separated sufficiently to give rise to individual light points on the detector chip of an optical detector such as a HDNS 2000 or the like.

In the same field of endeavor, **Hu** teaches the friction material containing small reflecting particles that are separated sufficiently to give rise to individual light points (*Col. 3, Ln. 12-24, FIGs. 4-5*) on the detector chip of an optical detector such as a HDNS 2000 or the like (*i.e. obvious Design Choice*).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine **Oberg** teaching of loop means comprising flexible support material and friction material strips with **Hu** teaching of the friction material containing small reflecting particles that are separated sufficiently to give rise to

individual light points on the detector chip of an optical detector *to providing the accuracy and reliability of the pointing device.*

Response to Arguments

4. Applicant's arguments, see Page(s) 5 filed 03/24/2010, with respect to 35 U.S.C. §112 2nd ¶ have been fully considered and are persuasive. The Rejection under 35 U.S.C. §112 2nd ¶ has been withdrawn.
5. Applicant's arguments filed 03/24/2010 have been fully considered but they are not persuasive.

Applicant argues that "the prior art does not teach or suggest a loop means for a pointing device wherein stiffening strips or equivalent means have a collective axial length greater than the circumferential widths of a plurality of stiffening strips or equivalent means". However, the Examiner respectfully disagrees because it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the size and shape of Oberg's loop means (*FIGs. 13 & 20*) to create the stiffening strips or equivalent means having an axial length, greater than the collective circumferential widths of a plurality of stiffening strips or equivalent means so that the loop means that would yield in a predictable results accommodate the Choice of Design of different makes, models, styles, and consumers' taste, *In re Schreiber*, 128 F.3d 1473, 44 USPQ2d 1429 (*Fed. Cir. 1997*).

6. Claims **4, 5, 7-9, 16, and 19** are withdrawn.

Conclusion

The prior art(s) made of record and not relied upon (is)/are considered pertinent to applicant's disclosure: Rahman; Abdul W. B. A. (US Patent No. 4928093).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH T. LAM whose telephone number is (571)270-3704. The examiner can normally be reached on M-F (7:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on (571) 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vinh T Lam/
Examiner, Art Unit 2629

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Supervisory Patent Examiner, Art Unit 2629